**NAS411** 

### ADOPTION NOTICE

NAS411, "Hazardous Materials Management Program," was adopted on 5 April 1994 for use by the Department of Defense (DoD). Proposed changes by DoD activities must be submitted to the DoD Adopting Activity: Headquarters Air Force Materiel Command, Aeronautical Systems Center, ATTN: ASC/ENOSD, Building 125, 2335 Seventh Street, Suite 6, Wright-Patterson AFB OH 45433-7809. Department of Defense activities may obtain copies of this standard from the Defense Printing Service Detachment Office, 700 Robbins Avenue, Building 4D, Philadelphia PA 19111-5094. The private sector and other Government agencies may purchase copies from Aerospace Industries Association of America, Inc., 1250 Eye Street N.W., Washington DC 20005.

Custodians:

Army - AM

Air Force - 11

Adopting Activity: Air Force – 11 (Project ENVR-0035)

Review Activities:

Army - MD-1, PT

Navy - MC

Air Force - 13

DLA-ES

User Activities:

Army - PT

Navy - OS

Air Force - 31

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#### HAZARDOUS MATERIALS MANAGEMENT PROGRAM 1.

Scope. This NAS411 was created by the Aerospace Industries Association as an industry standard to be applied to United States government acquisition of systems, system components, associated support items, and facilities. It applies to all acquisition phases; e.g., Concept Exploration, Demonstration and Validation, Engineering and Manufacturing Development, Production and Deployment, Operations and Support, and Disposition.

The Hazardous Materials Management Program (HMMP) is the contractor's plan to assure appropriate consideration is given to the elimination/reduction of hazardous materials, and to the proper control of hazardous materials that are not eliminated, for system(s), system components, and associated support items throughout all phases of the system life cycle. The emphasis is on eliminating or reducing hazardous materials early in the design of processes and system products.

This NAS411 shall only be applicable to those contract deliverables that are specifically cited elsewhere in the contract as being subject to this standard.

- Purpose. The purpose of the HMMP is to influence the system and product design process to 1.2 eliminate, reduce or minimize hazardous materials, and control hazardous materials in all acquisition phases of a program for the protection of human health and the environment. This is to be accomplished while minimizing system cost and risk to system performance.
- Tailoring. Tasks described in this NAS411 shall be tailored to meet acquisition program 1.3 requirements. The applicable tasks shall be negotiated with the contractor based upon the requirements of the acquisition phase and size of the program.
- 1.4 Consistency. Tasks described herein are to be consistently applied across all contractor programs, if appropriate, to allow plant-wide uniformity in practices and processes. The Contracting Officer shall designate a representative(s) who has the authority to grant waivers or approve deviations from conflicting requirements for alternative processes and materials. Tasks performed after system delivery may be performed on a contract by contract basis in accordance with the contract statement of work.
- 1.5 Compatibility With Existing Regulations. The contractor may satisfy HMMP data requirements by referencing or resubmitting data in the format already required by any regulation or statute. Data requirements that exceed or differ from existing statutory or regulatory requirements shall be subject to the provisions of the "Changes" clause in the contract.

	LIST OF CURRENT SHEETS			
(2)	NO.	REV.	NO.	REV.
	1	2	5	1
	2	1	6	1
	3	2		
	4	1		

# CUSTODIAN PROCUREMENT TECHNIQUES COMMITTEE

**PROCURMENT SPECIFICATION** 

NONE

THIRD ANGLE CLASSIFICATION STANDARD PRACTICE

**NAS411** 

SHEET 1 OF 6

HAZARDOUS MATERIALS MANAGEMENT PROGRAM

TITLE

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#### 2. **DEFINITIONS**

- 2.1 Acronyms Used in NAS411. The acronyms used in this NAS411 are defined as follows:
  - a. - Department of Defense
  - OSHA Occupational Safety and Health Administration b.
  - MSDS Material Safety Data Sheet C.
  - Program Manager d. PM
  - e. **PCO** - Procuring Contracting Officer
  - HMMP Hazardous Materials Management Program f.
  - Statement of Work SOW g.
  - FAR - Federal Acquisition Regulation h.
  - RFP - Request for Proposal i.
  - CAS - Chemical Abstract Service j.
  - ACO - Administrative Contracting Officer k.
  - CO - Contracting Officer I.
  - DFARS Defense Federal Acquisition Regulation Supplement
- 2.2 <u>Definitions</u>. The following definitions apply:
- Hazardous Materials. Any material that due to its chemical, physical, or biological nature that causes safety, public health, or environmental concerns.
- Hazardous Materials Management Program (HMMP) Plan. A description of the planned tasks and activities to be used by the contractor to implement the system Hazardous Materials Management Program. The HMMP is to be used in the context of the management strategy for which improvements may be made to eliminate, minimize or control hazardous materials.
- Contracting Officer (CO). A person with the authority to enter into, administer, and/or terminate contracts on behalf of the government. The Procuring Contracting Officer (PCO) refers to the person at the buying activity who has the authority to enter into contracts. The Administrative Contracting Officer (ACO) refers to the person at the contract administration office, e.g. DPRO, who performs post award functions.
- Hazardous Materials Indentification. The process used to identify hazardous materials required for operation and support.
- 3. GENERAL HAZARDOUS MATERIALS MANAGEMENT PROGRAM REQUIREMENTS
- HMMP Requirements. The contractor shall conduct a Hazardous Materials Management Program (HMMP) which will include measures for the elimination, reduction, or control of hazardous materials. An HMMP shall be tailored for each acquisition phase of the system as appropriate to the acquisition phase and available funding and consistent with procuring activity projections of the scope and probability of subsequent systems acquisition.
- 3.2 HMMP Applications. The contractor may apply the HMMP on a plant-wide basis, a contract specific basis, or a combination of plant-wide and contract specific.
- 3.3 Changes and Conflicting Requirements. The contractor shall notify the procuring activity of any changes to the HMMP or conflicts between the HMMP and the other contract requirements, regulations or statutes. The contractor shall request resolution from the CO in the event of conflicting requirements between the HMMP and local, state, and federal environmental regulations. Any changes to the HMMP shall be subject to the provisions of the "Changes" clause in the contract.



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3.4 <u>Approved Plan</u>. The approved HMMP Plan provides the basis of understanding between the contractor and the procuring agency with respect to how the HMMP shall be executed to meet contractual requirements.

### 4. SPECIFIC HAZARDOUS MATERIAL PROGRAM REQUIREMENTS

- 4.1 <u>Hazardous Materials Management Program (HMMP) Plan Proposal Requirement.</u> In accordance with the solicitation, the Preliminary HMMP Plan shall be submitted to the procuring activity as part of the proposal. This Preliminary HMMP Plan shall describe an overview of the contractor's HMMP. The successful offeror will provide a full HMMP Plan described in Section 5.2.
- 4.2 <u>HMMP Objectives</u>. The HMMP Plan shall define the management strategy to systematically eliminate, minimize, or control hazardous materials while maintaining an appropriate balance with performance requirements specified in the contract and the cost of the HMMP. The HMMP Plan shall define the contractor's approach to assure that:
  - a. Consideration is given throughout all acquisition phases of the system;
- b. Hazardous materials and processes associated with each contract hardware deliverable item are selectively identified and evaluated based on environmental and health concerns;
- c. Hazardous materials elimination, minimization, or control are considered and detailed in the system design and the manufacturing processes.
- 4.3 <u>HMMP Plan Tasks</u>. The following tasks will be tailored to reflect the program and acquisition phase:
- 4.3.1 <u>Organization Structure</u>. The HMMP Plan shall identify and describe organizational and functional relationships and the lines of communication using contractor specified format. Responsibility for each task shall be described with respect to its organizational element.
- 4.3.2 <u>Hazardous Materials Identification/Analysis/Evaluation</u>. The HMMP Plan shall define the process the contractor will use to identify the hazardous materials to be addressed in the performance of the contract. The procuring activity may identify and prioritize in the contract the specific hazardous materials for elimination, minimization, or control. The Plan will also identify those hazardous materials that will be selected for reporting under the contract. The Plan will describe the analysis and prioritization techniques to be used to evaluate the risks associated with those identified hazardous materials. The description shall include the contractor's process for material selection and evaluation. The Plan shall also identify the specific information to be provided to the procuring activity as prescribed in Section 5.
- 4.3.3. <u>Environmental and Health Evaluation</u>. The HMMP Plan shall describe the basis of evaluation and data base(s), to be used for the environmental and health risk evaluation. Where a material to be used falls under the Toxic Substances Control Act Section 5(a) research and development exception, the HMMP Plan shall describe the process and the timing of the process which will be used to evaluate potential hazards and communicate these hazards to the contracting agency.

**NAS411** 

SHEET 3

(1)11 MARCH 1994



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- 4.3.4 Trade-off Analysis. The HMMP Plan shall define the overall process to:
  - Analyze the potential costs associated with trading a hazardous material for a less hazardous material over the life cycle of the product subject to data available at time of delivery;
  - Document the trade-off analysis (including cost/benefit analyses) employed for selecting materials and processes;
  - Assign responsibility for specific tasks.
- 4.3.4.1 <u>Trade-off Analysis Documentation and Recommendations</u>. The HMMP Plan shall describe the selection process and criteria to be used for screening hazardous materials. The HMMP Plan shall describe the documentation process to be utilized to establish a record of any Trade-off Analysis activity and the development of recommendations. This record shall contain the justifications for using a specific material or process, and the reasons for rejecting other materials and processes. The record shall include known potential costs of particular hazardous materials in various phases of military use. The HMMP Plan shall identify the medium by which the contractor will provide this information to the contracting agency.
- 4.3.4.2 Assignment of Responsibility. The HMMP Plan shall identify the contractor functions with the responsibility to implement actions resulting from the trade-off analysis.
- Subcontractor Requirements. The prime contractor shall describe how and to what extent the HMMP requirements will be flowed down to subcontractors.
- 4.3.6 Milestones. The HMMP Plan shall define significant HMMP milestones and provide an implementation schedule.
- <u>Training.</u> The HMMP Plan shall identify the contractor's approach for any specialized training to support the objectives of the HMMP.
- Functional Program Integration. The HMMP shall describe the methods and procedures that will be used to integrate and coordinate the HMMP requirements throughout other applicable functional programs and master plans.
- 4.4 Report Content Requirements. The HMMP Report shall contain the following information.
- 4.4.1 Identification of all hazardous materials delivered and required for operation and support to include the following:
  - Material Safety Data Sheet;
  - Corresponding Specifications and Standards that require the use of the hazardous material:
  - Where used in operation and support or within the deliverable item;
  - If applicable, at the time of delivery, identify any U.S. statutory phase-outs or bans. As appropriate the contractor and the procuring activity will negotiate the identification of other worldwide hazardous materials legal considerations.
- 4.4.2 Hazard Evaluation to include the following:
  - List of prioritized hazardous materials;
  - Basis for priority determination;
  - Processes using prioritized hazardous materials:
  - Corresponding military process specification:
  - Alternative material and process considerations.



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**NAS411** 

11 MARCH 1994

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## 4.4.3. Trade-Off Analysis as required in 4.3.4 to include the following:

- Cost/Benefit Analysis:
- Itemization of non-cost variables affecting trade-off;
- Trade-Off analysis conditions and assumptions;
- Hazardous materials and process use recommendations.

#### 5. DATA SUBMITTALS

- 5.1 Reporting Requirements. The HMMP Report data submittals shall be submitted as required by the contract activity, e.g. Contract Data Requirements List (CDRL)
- 5.2 HMMP Plan

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- 5.2.1 Format. The HMMP Plan format shall be contractor selected.
- 5.2.2 Table of Contents. Identification of the elements of the HMMP Plan shall be correlated to the paragraph and page numbers of the plan.
- Glossary. The HMMP Plan shall contain a list of definitions of all unique words, acronyms, and symbols used in the Plan.
- Scope. The HMMP Plan shall describe the scope of the HMMP for the applicable contract line items in accordance with Section 1.1 herein.
- Schedule and Milestones. The HMMP Plan shall describe the HMMP schedule 5.2.5 and milestones.
- Plan Content Requirements. 5.2.6
- 5.2.6.1 Contractor HMMP organizational identification, outline and responsibilities, as described in Section 4.3.1.
- 5.2.6.2 Methods of hazardous materials identification, analysis and evaluation, as described in Section 4.3.2.
- 5.2.6.3 Methods for performing chemical elimination/minimization trade-off analysis, as described in Section 4.3.4.
- 5.2.6.4 The contractor shall describe the scope and procedures of subcontractor flowdown, as described in Section 4.3.5.
- 5.2.6.5 Special Hazardous materials training requirements, as described in Section 4.3.7.
- 5.2.6.6 Methods of HMMP integration with other functional programs, as described in Section 4.3.8.5
- 5.3 Report.
- Format. The report format shall be contractor selected. 5.3.1
- 5.3.1.1 In the event of a follow-on contract, the contractor may use the previously submitted HMMP report as a baseline and show changes made per the follow-on contract so that the HMMP remains a "living document."



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- Table of Contents. Identification of the elements of the HMMP Report shall be correlated to 5.3.2 the paragraph and page numbers of the Plan.
- Glossary. The HMMP Report shall contain a list of definitions of all unique words, acronyms, 5.3.3 and symbols used in the Plan.
- 5.3.4 Report Contents: The contractor shall report the information described in section 4.4.

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SHEET 6

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JULY 1993

APPROVAL DATE